



## Urban Dentistry

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June 2000

**Into the void: Tate Modern  
by Herzog & de Meuron  
Richardson in The Hague**

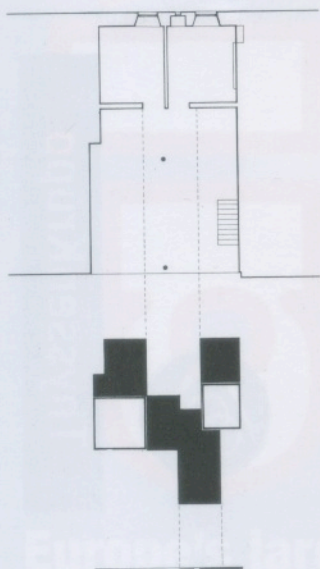
Dental surgery by Clarke Devine  
Baldeweg's Las Palmas campus  
Technology: glazing listed roofs  
Product: Timber & stains,  
H&V energy & insulation





## BUILDING ■ Urban dentistry: Clarke Devine on Argyle Street

*Colour and light are the hallmarks of an inner city surgery. Critique by Fred Smith. Photos: Keith Hunter.*



Argyle Street was the principal artery of nineteenth-century Glasgow. Two four-storey parallel walls of sandstone held homes for many. A high-density urban section of stacked apartments of varying sizes was connected communally to a street of shops, which depended for their survival on the density of support from above.

This was, and remains, the constructed three-dimensional fabric of street life in inner Glasgow. These tenements are like enormous railway carriages, connected together by shorter, intersecting streets running north-south, a fragment of the grid-iron pattern of this city. Today the street is run down, down-market, shabby and tough. There is no grass, no flowers. The only relief in a rain-cloudy Glasgow sky is a single mature tree.

Diagonally opposite, a deceptively anonymous shop front has been inserted. Behind the facade – an explosion of red, blue, grey and sea-green – is a new dental surgery. The shock of the new is both a surprise and a delight in this gritty Glasgow setting. It is as if the tree had cast

some seed which had then flowered under the tenements on the sunny side of the street.

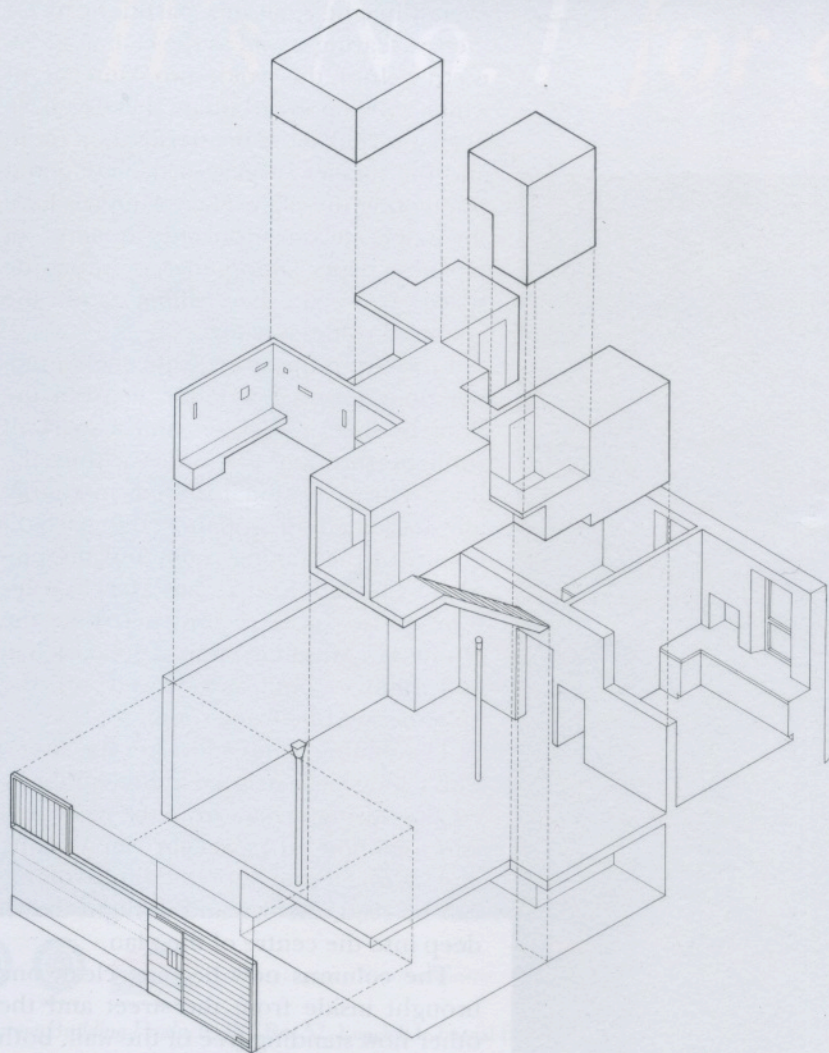
The architects, Clarke Devine, were approached by dentists Anne and Aubrey Craig, who wanted to enlarge their surgery when the next-door shop became available. The new surgery is shaped from a volume 7.2 metres wide, 12 metres deep and a floor-to-ceiling height of 3.6 metres. Between cross walls, the tenement above is supported by two existing cast-iron columns. Around these two columns a Rubik Cube of lower volumes has been locked into place.

The requirement for three individual





The clients see dentistry as an open profession that contributes to the life of the community, writes **Clarke Devine**. They previously worked from a converted shop in Argyle Street and approached us after buying the shop next door with a view to expanding their practice. To begin with, careful study was made of the structural condition of the tenemental superstructure. The first move was to extract the accumulated internal fabric and the wall between the shops, opening out the double shell. The ground floor layout of the Victorian tenement had ground-floor shops between closes, with a back storage space defined by a wall perpendicular to the party walls. The intention was to work with this figure by cutting openings defining the space of the principal surgeries and acting as a filter to the north and south light. A new three-dimensional structure was inserted to organise the entry and service spaces and define the full volume. From this inserted structure two 'lanterns' emerge. During the day these glow in a brilliant white light and at night are transformed into vivid colours like the lights of passing traffic.

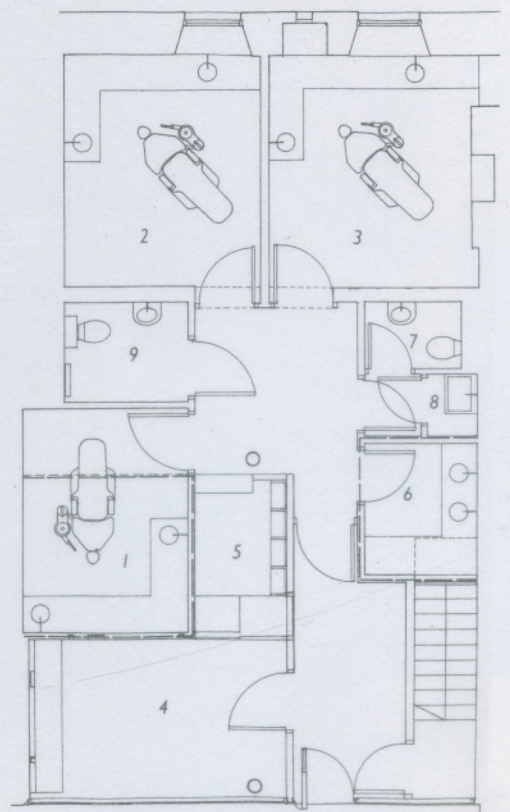


**Opposite** Street front; diagram of inserted structure.

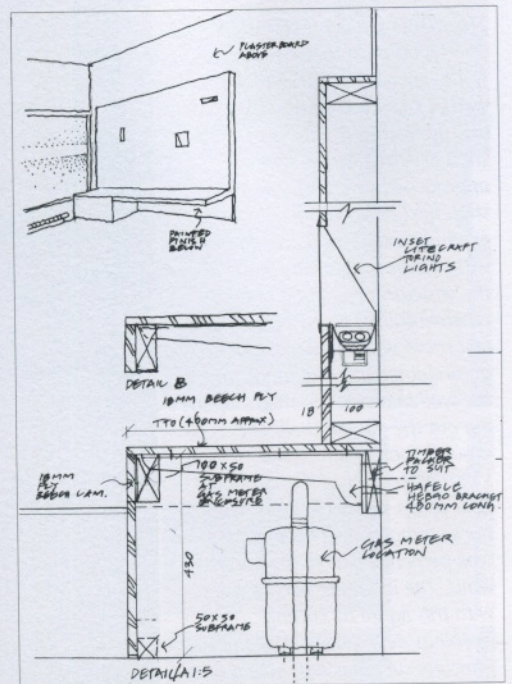
**Above** View into reception and surgery 1.

**Left** Isometric of shell and structure.

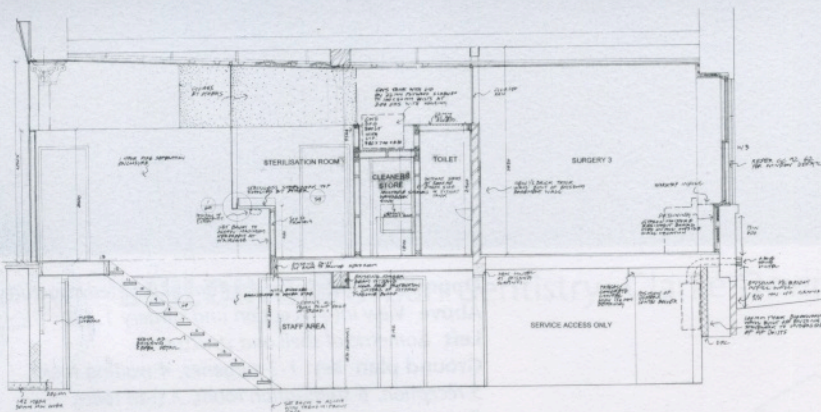
**Ground plan** Key: 1-3 surgeries, 4 waiting room, 5 reception, 6 sterilisation room, 7 staff toilet, 8 cleaner's store, 9 disabled toilet. The basement, reached by stairs adjacent to the entrance, contains a staff area, technician's lab and two storage rooms.







Above Waiting room and bench seat detail.  
Left/below Long section and detail of facade.



surgeries, a separate sterilisation room, reception area and toilets could easily have created a box-like, claustrophobic set of spaces, destroying the quality of this newly created void. This problem has been inventively solved by limiting the overall height of all new partitions to 2.4 metres, leaving a void to the ceiling of 1.2 metres. Into this void, two lanterns of white-ribbed polycarbonate sheeting have been inserted above the sterilisation room and the smaller surgery, articulating and orientating the plan. These lanterns have the delicate, translucent quality of Japanese paper lampshades, defining the space between the ceiling and the coloured volumes below.

Entry from the street is through a timber door into a low lobby, lit from the floor by small uplighters and a spark of sunlight through a window within the door. This transitional space is intentionally darkened to enhance the daylight quality of the waiting room and the pin-wheel circulation. It recalls Mackintosh's own house (now reconstructed in the Hunterian Museum), where the dark hall and dining room are played off the ephemeral white living-room.

The waiting room addresses the street, with a long clear strip set in the sandblasted glass giving privacy from the pavement and a glimpse of passers-by when sitting and waiting. From here the whole volume can be read, the eye and daylight drawn deep into the centre of the plan.

The columns now become clear, one brought inside from the street and the other now standing free of the wall. Both



touch a gently tilted ceiling, opening towards the sun – a device similar to the soffit in Chareau's Maison de Verre.

The subdivisions are painted to read as part of the wall surface. Any attempt to change material and colour and articulate doors and frames from walls would have been too fussy and out of scale. Where the two doors enter the rear surgeries, the existing thicker wall is increased in depth by planting the doors and frame onto this wall as part of the folding of the 2.4 metre wall plane. This gives a sense of hierarchy to these principal surgeries. Mackintosh's doors into the first-floor studios at the Glasgow School of Art come to mind, suggesting the journey between north and south light and the importance of the room being entered.

The folded planes of colour do not define the functional spaces as hermetic entities; rather they contribute to an equilibrium where colour forms an intrinsic element of architectural expression. It is not decorative. Above these dynamic planes of blue, red and grey, the ceiling runs throughout, a simple plane without light fittings, while the continuous floor surface of sea green allows the coloured planes to appear as floating screens within the overall shell. Lighting combines daylight and sunlight with artificial, either in the floor or embedded in the wall planes. Coloured tubes illuminate the ceiling at night from two lanterns, transforming the whiteness of daylight into a surreal play of blue and green.

Birch-faced plywood is used in the waiting area for the bench seat and toybox and in the reception for records and stationery. These timber surfaces are where the hand makes contact with the 'tree'.



The dentists' chairs and surgical equipment are the only evidence of purpose. This is minimal, but not minimalistic, architecture. It is the architecture of day and, given Glasgow's long winter, of night – an interior that belongs to Glasgow and the northern light.

A hundred years ago Miss Cranston commissioned Mackintosh to carry out a number of remarkable tearooms; Argyle Street had one. Today we have in Argyle Street a quite remarkable interior which is specific to its purpose, specific to its place and specific to architecture.

*Fred Smith is an architect and lecturer at the Mackintosh School of Architecture in Glasgow and the Städelschule in Frankfurt.*

**Right** At night, when the building is unoccupied, the light changes to blue and green.

**Below** Study models for the lighting and inserted structure.

**Below left** Dentist's eye view.

#### Project team

Architect: Clarke Devine; structural engineer: Cameron Ross; qs: Donald Campbell Associates; client: Aubrey and Anne Craig.

#### Selected subcontractors and suppliers

Floor: Freudenberg; dental equipment: Wright Health Group; plastics: Stockline Plastics; timber: Woyka; ironmongery: Laidlaw, Dorma; lighting: Litecraft; glazing: Joseph Beattie & Son; metal fabrication: Samuel McGarva & Son; signage: Deans Group; radiators: MFT (UK), Myson; alarms: CSS; stainless steel: Associated Metal (Stainless).

